

## **REMARKS**

Claims 31-43, 45-56 and 58-60 are pending in the application. Claim 49 has been withdrawn. Claims 31-41 are allowed. The following rejections are at issue and are set forth by number in the order in which they are addressed:

1. Claims 45-47 stand rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite;
2. Claims 42-43, 48, 50-56 and 58-60 stand rejected under §112, first paragraph, as allegedly lacking an adequate written description; and
3. Claims 50-53 stand rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Jindal et al. (Bio/Technology, 1995, vol. 13, pp. 1105-1109; hereinafter Jindal).

### **I. The claims are Definite**

The Examiner has rejected Claims 45-47 under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. In particular, the Examiner states "The recitation of "said administration" in claim 45 lacks antecedent basis in claim 41." (Office Action, pg. 2). The applicants have amended Claim 45 to instead specify "administering." As such, the applicants submit that Claim 45 has proper antecedent basis and respectfully request that the rejection be withdrawn.

### **II. The Claims are supported by an adequate written description.**

The Examiner has rejected Claims 42-43, 48, 50-56 and 58-60 under §112, first paragraph, as allegedly lacking an adequate written description. In particular, the Examiner states "the genus of proteins encompassed by the method claims is highly variant because the administered fragment of Hsp70 having at least 70% homology to hsp70 need not have the same functional requirement of directly activating NK cells." (Office Action, pg. 3). The Examiner further states "Claims 50-54 are compositions which are not limited by a functional attribute...." (Office Action, pg. 4).

The Applicants respectfully disagree and submit that the claims are supported by sufficient written description. Nonetheless, in order to further the Applicants business interests (and while reserving the right to prosecute the original (and similar) claims in the future), the applicants have amended independent Claims 42, 50, and 55. The amended claims specify that the isolated protein, fragment, or polypeptide induce an immune response by NK cells, and further that the response increases cytolytic activity of the NK cells or stimulates proliferation of the NK cells. The Applicants submit that this claim terminology provides a functional definition of the claims' compositions and methods and thus overcomes the Examiner's rejection. As such, the Applicants respectfully request that the rejection be withdrawn.

### **III. The Claims are not Anticipated**

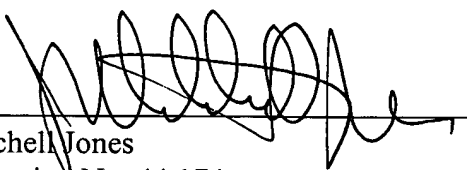
The Examiner has rejected Claims 50-53 under 35 U.S.C. §102(b) as allegedly being anticipated by Jindal. In particular, the Examiner states "Jindal et al. discloses isolated, purified recombinant human Hsp70 eleuted by a NaCl solution....Both HEPES and NaCl are pharmaceutically acceptable diluents." The Applicants respectfully disagree and submit that Jindal does not teach all of the elements of the claims. In particular, Jindal does not teach the claim element of a pharmaceutical composition. On page 2, the specification defines pharmaceutical preparations as "substances and preparations of substances which, when used on or in the human body, are meant for healing alleviating, preventing or recognizing diseases, ailments, physical defects or pathological discomforts."

Nonetheless, in order to further the Applicants business interests (and while reserving the right to prosecute the original (and similar) claims in the future), the applicants have amended independent Claims 50 to remove the claim element of a diluent. Jindal et al does not teach or suggest the claim element of a pharmaceutically acceptable carrier or excipient. Indeed, Jindal does not teach or suggest the use of Hsp70 as a therapeutic agent. Thus, the Applicants submit that Jindal does not teach all of the elements of the claims. As such, the Applicants request that the rejection be withdrawn.

**CONCLUSION**

All grounds of rejection and objection of the Final Office Action of May 5, 2004 having been addressed, reconsideration of the application is respectfully requested. It is respectfully submitted that the invention as claimed fully meets all requirements and that the claims are worthy of allowance. Should the Examiner believe that a telephone interview would aid in the prosecution of this application, Applicant encourages the Examiner to call the undersigned collect at (608) 218-6900.

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